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IS 4286 (1976) : Domestic Coke [PCD 7: Solid Mineral Fuels]

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Indian Standard
SPECIFICATION FOR DOMESTIC COKE
(First Revision)

UDC 662.749.2



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Indian Standard

SPECIFICATION FOR DOMESTIC COKE

(*First Revision*)

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Indian Standard
SPECIFICATION FOR DOMESTIC COKE
(First Revision)

0. FOREWORD

0.1 This Indian Standard (First Revision) was adopted by the Indian Standards Institution on 30 December 1976, after the draft finalized by the Solid Mineral Fuels Sectional Committee had been approved by the Chemical Division Council.

0.2 This standard was first published in 1967 under the title 'Specification for processed solid smokeless fuel'. However, in view of nationalization of coal industry and setting up of a number of new plants for producing coke, the Sectional Committee responsible for the preparation of this standard felt the need to review it to bring about proper coordination in the production practices and use of coke. In this revision requirements for moisture and volatile matter have been modified and that of calorific value has been dropped.

0.3 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS : 2-1960*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1. SCOPE

1.1 This standard prescribes requirements and methods of sampling and test for domestic coke.

2. TERMINOLOGY

2.1 For the purpose of this standard the definitions given in IS : 3810 (Part III)-1977† shall apply.

*Rules for rounding off numerical values (*revised*).

†Glossary of terms relating to solid mineral fuels: Part III Terms relating to coke (*under preparation*).

3. CLASSES

3.1 There shall be 3 classes of domestic coke, namely, Class 1, Class 2 and Class 3, depending on the ash content (*see* Table 1).

TABLE 1 REQUIREMENTS FOR DOMESTIC COKE

SL NO.	CHARACTERISTIC	REQUIREMENT FOR			METHOD OF TEST [REF TO CL NO. OF IS : 1350 (PART I)- 1969*]
		Class 1	Class 2	Class 3	
(1)	(2)	(3)	(4)	(5)	(6)
i)	Moisture, percent by mass, <i>Max</i>	8	8	8	6
ii)	Volatile matter, percent by mass (on dry basis)	3 to 10	3 to 10	3 to 10	7
iii)	Ash content, percent by mass, <i>Max</i> (on dry basis)	30	40	50	8

NOTE — In the case of domestic coke made from lignite, moisture content and volatile matter not exceeding 15 percent by mass each may be permitted.

*Methods of test for coal and coke: Part I Proximate analysis (*first revision*).

4. REQUIREMENTS

4.1 Size Range — The ex-plant size range of the material shall be between 10 and 100 mm. Not more than 10 percent by mass of the material shall either pass the 10-mm IS Sieve (PS) or be retained on 100-mm IS Sieve (PS) (*see* IS : 460-1962*).

4.2 Shatter Index — Shatter index of the material when tested in accordance with the method prescribed in 4 of IS : 1354-1964†, using coke of size above 25 mm, shall be as follows:

Over 25 mm, percent by mass, <i>Min</i>	65
Over 12·5 mm, percent by mass, <i>Min</i>	80

5. SAMPLING

5.1 Representative samples of the material shall be drawn as prescribed in IS : 436 (Part II)-1965‡.

*Specifications for test sieves (*revised*).

†Methods of test for coke-special test (*revised*).

‡Methods for sampling of coal and coke: Part II Sampling of coke (*revised*).

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